



MEMORANDUM

DATE: April 3, 2015
TO: Matt Hermen, Clark County
FROM: Ray Delahanty, AICP; Julie Sosnovske, P.E.

SUBJECT: Clark County TIF Update
Task 5: Redefined Geographic Boundaries Memorandum

P#14199-000-005

The purpose of this memorandum is to present and evaluate potential new boundary systems for Clark County's Transportation Impact Fee (TIF) program update. The project team has developed three candidate boundary systems and suggested evaluation criteria for selecting a new system. The boundary systems and evaluation results are discussed in the following sections.

Current Boundary System












In 2009, Clark County and the City of Vancouver executed an Interlocal agreement to jointly administer a TIF program. The joint program established several TIF districts that were representative of growth patterns at that time. Population and employment growth have led to different development patterns between the two jurisdictions, creating the need for separate TIF programs. The City is currently near the end of a project that will create a separate TIF program that covers all areas within the City limits. This has elevated the need for Clark County to revise its existing program, including its TIF District Map, congruent with unincorporated areas of the County.

The existing TIF District Map is shown in Figure 1. While this map does not reflect the City's recent changes, it does reflect a starting point for the County's TIF update. District lines are based on historical development patterns and land use designations throughout the County. There are several smaller Districts in the southern portion of the County, closer to urban areas, where there are higher densities of both population and employment. Two rural districts cover most of the northern portion of the County.

The current TIF program operates eight different TIF districts: East City, Evergreen, North Orchards, South Orchards, Mount Vista, Hazel Dell, Rural 1 and Rural 2 (as shown in Figure 1). These districts are loosely based on neighborhoods incorporated over time, but they do not strictly follow City boundaries or other clear jurisdictional delineations for each district. Within each district, there is a different fee, ranging from \$52 to \$613 per new development trip.

Legend

Existing Districts

-  Vancouver City Limits
-  City (Excluded from TIF)
-  Vancouver
-  East City
-  Evergreen
-  Hazel Dell
-  Mt. Vista
-  North Orchards
-  South Orchards
-  Rural 1
-  Rural 2

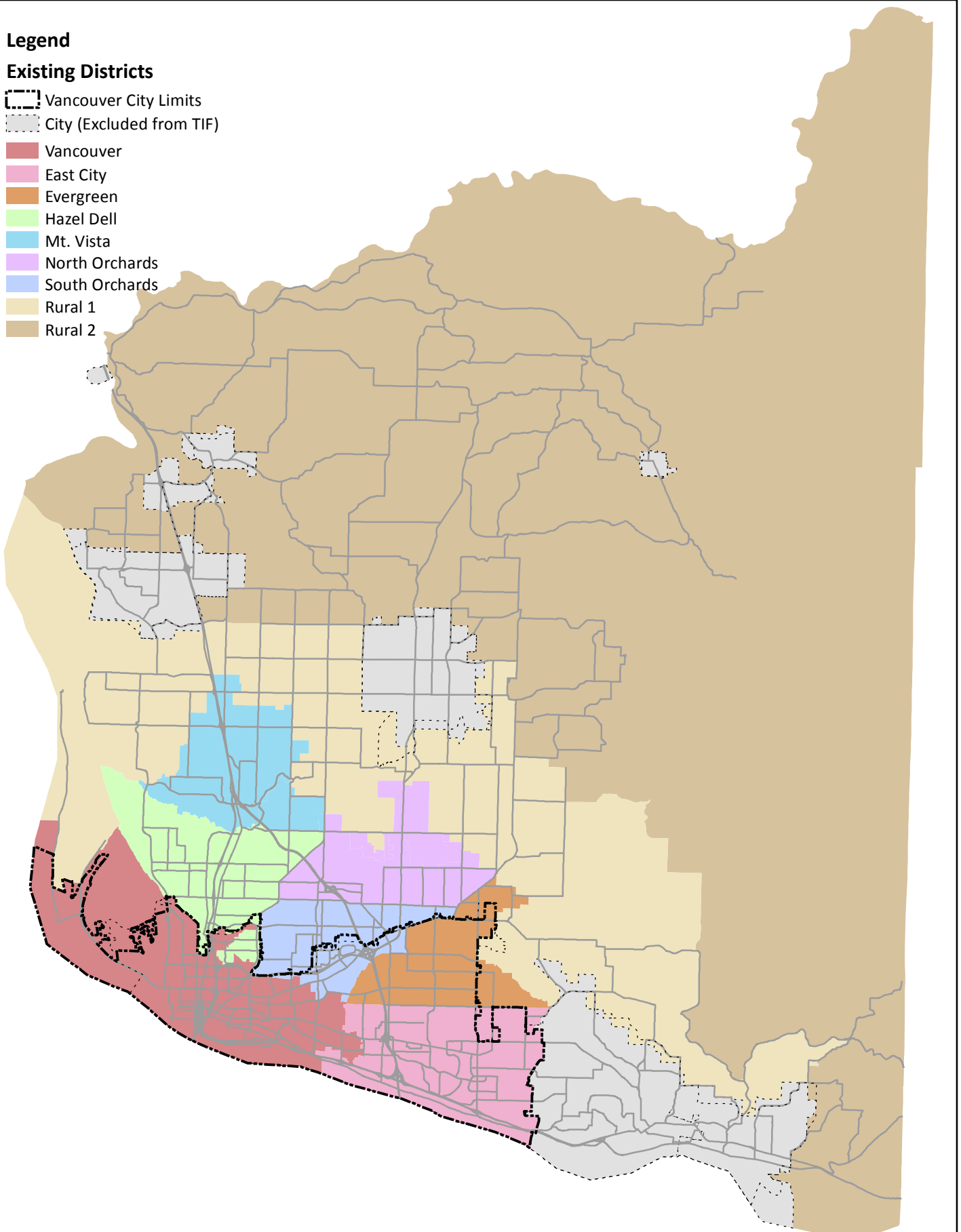


Figure 1: Existing Clark County TIF Districts





Developers pay the TIF associated with the district where their project is located. The fee is paid at the time of development permit issuance. Alternatively, developers can fund required transportation improvements in lieu of the TIF, with the following caveats related to the boundary system:

- Different zones pay different rates per trip, which are calculated using typical Institute of Transportation Engineers (ITE) vehicle trip rates
- Developers pay TIF at time of development permits, or they can improve or construct required transportation improvements. If the cost of the project exceeds the TIF cost for the project, the developer can apply for a TIF credit.
- If approved, the TIF credit can be used only for payment of a future TIF (not any other mitigation fee)
- It can only be used within the TIF district it is issued

Each district boundary contains a set of capital projects that are partially funded by TIFs from that district. Per-trip rates for districts that lie at least partially within Clark County are shown in Table 1, below.

Table 1. Clark County 2014 Traffic Impact Fee Rates

TIF District	Rate/ Trip
East City	\$351
Evergreen	\$412
North Orchards	\$553
South Orchards	\$389
Mount Vista	\$613
Hazel Dell	\$375
Rural 1	\$315
Rural 2	\$52



Potential New Boundary Systems









Considering known issues with the existing boundary system and best practices from other jurisdictions, the project team developed three new boundary system concepts for consideration. The three alternative systems are as follows:

- **Alternative 1: Five district system.** All cities within the county were excluded from consideration. Within the County, previous districts were maintained, with the exception of North Orchards and South Orchards, which were combined into a single Orchards district, and Evergreen, the remaining fragment of which was included in Rural 1. Also, the boundary between the Hazel Dell and Mt. Vista districts was redrawn to keep the Highway 99W Overlay intact and associated with the Hazel Dell district. Two rural districts were included, one for properties in the southern portion of the county and one for properties to the north.
- **Alternative 2: Four district system.** Same as Alternative 1, with only one Rural district and maintaining the existing boundary between Mt. Vista and Hazel Dell.
- **Alternative 3: Two district system.** Similar to Alternative 2, with a single Rural district, but with all other districts combined into a single Urban County district.

The three boundary alternatives are shown in Figures 2, 3, and 4. These alternatives recognize differences between the more urban portions of the county, closer to Vancouver City limits, and the rural portions of the county, which still have lower development potential and fewer transportation infrastructure needs. The alternatives also reflect the County's intention to manage its own TIF system for its own jurisdiction, separate from the City of Vancouver.

Legend

Alternative 1

-  Vancouver City Limits
-  City (Excluded from TIF)
-  Hazel Dell
-  Mt. Vista
-  Orchards
-  Rural 1
-  Rural 2
-  Arterial Streets

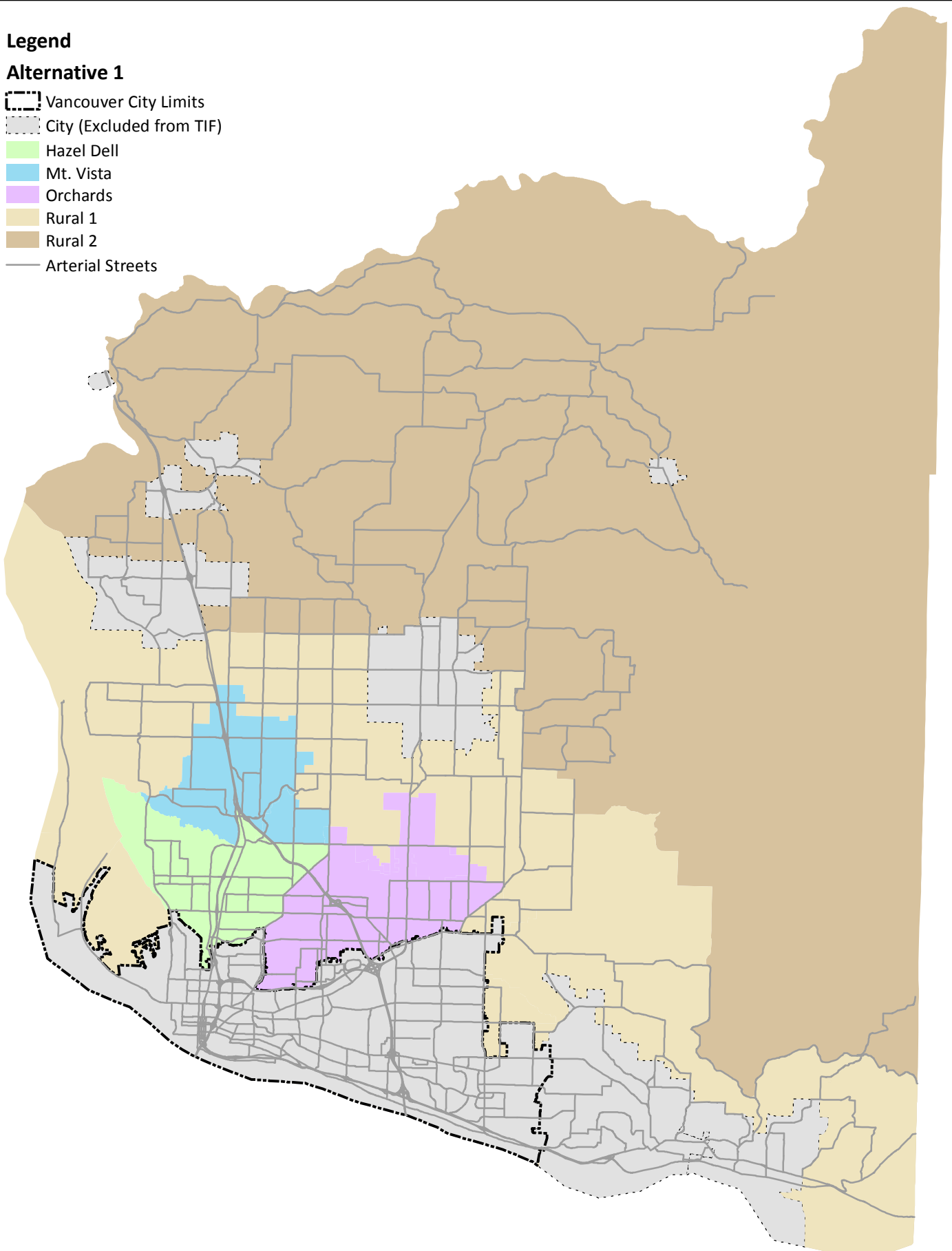


Figure 2: Clark County TIF Districts, Alternative 1



Legend

Alternative 2

- Vancouver City Limits
- City (Excluded from TIF)
- Hazel Dell
- Mt. Vista
- Orchards
- Rural
- Arterial Streets

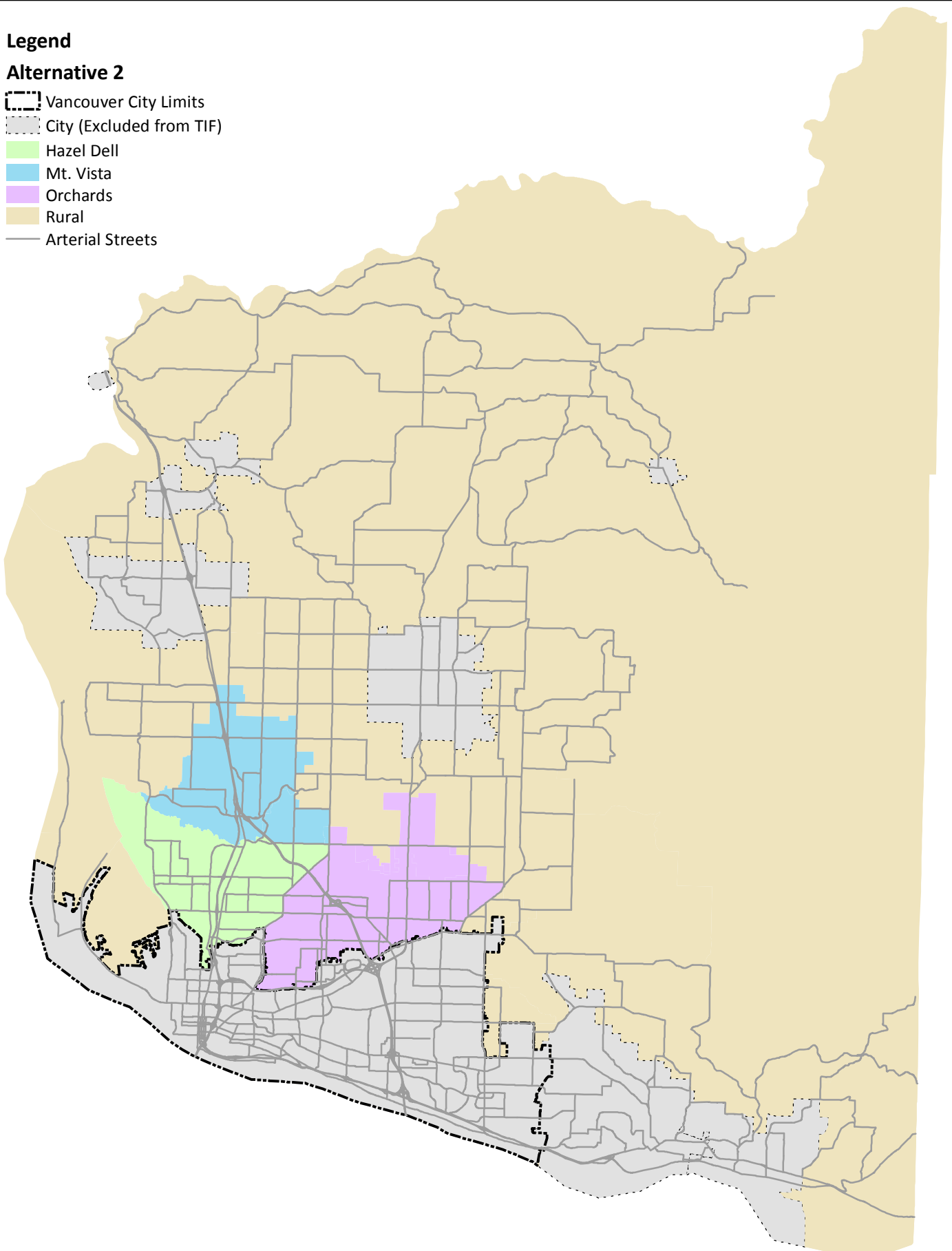







Figure 3: Clark County TIF Districts, Alternative 2



Legend

Alternative 3

-  Vancouver City Limits
-  City (Excluded from TIF)
-  Urban County
-  Rural
-  Arterial Streets

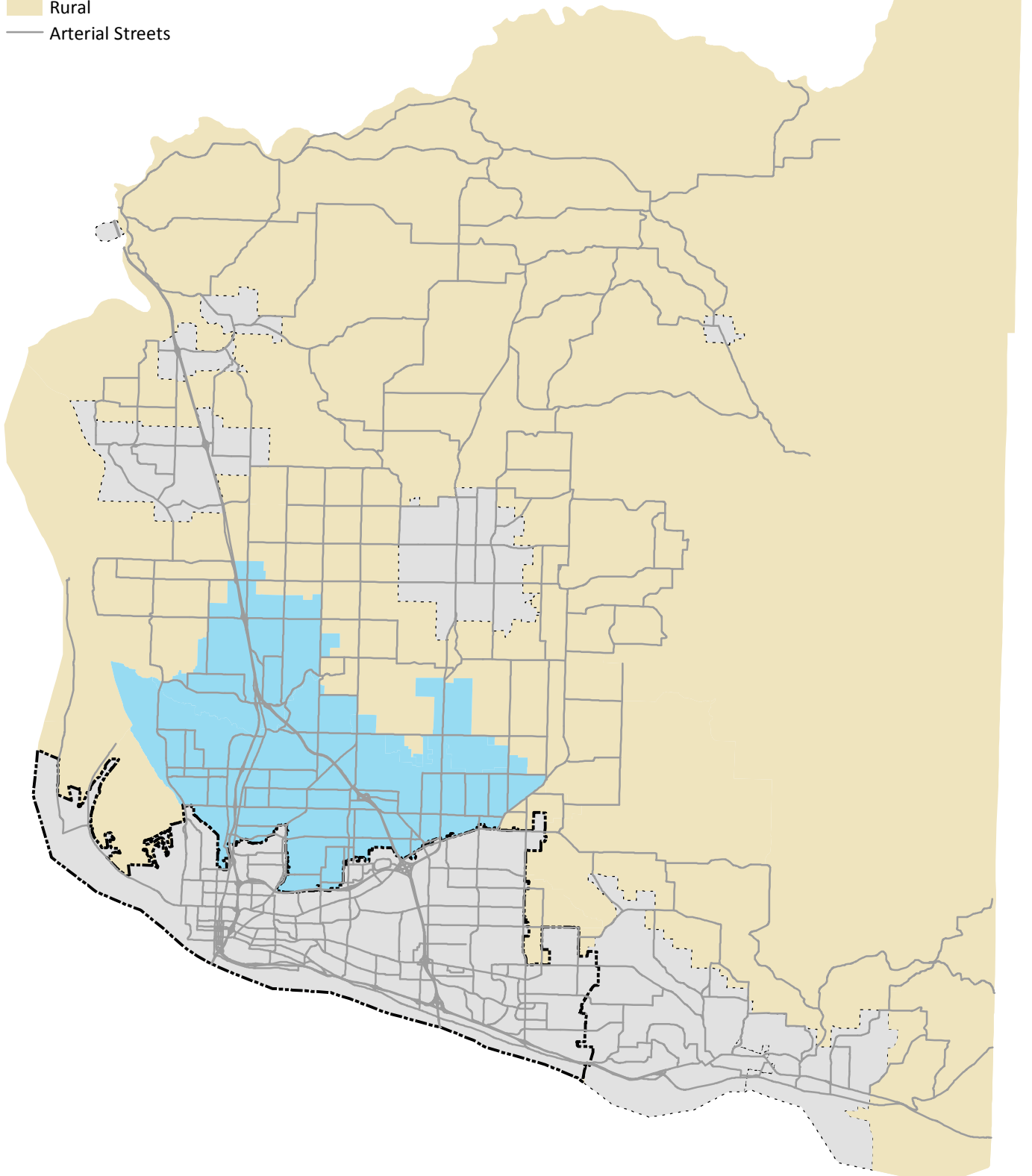


Figure 4: Clark County TIF Districts, Alternative 3





Criteria for New System

The following criteria were considered as the three alternative systems were developed, and are used to differentiate between the three alternatives in the following sections of this memo.

1. Simple for developers to interpret
2. Simple for County staff to administer
3. Defensible to public
4. Maintains a legal nexus between vehicle trip generation and facilities funded from each district.

Criteria 1 and 2 are straightforward: the fewer districts there are in a system, the easier it is to understand and administer. All alternatives perform better than the existing eight-district system.

The criteria related to defensibility and the nexus between trip generation and funding responsibility require more analysis. The analysis related to these two criteria are summarized in the next two sections:

- **Trip Growth Analysis.** This section analyzes the origins and destinations of **new** vehicle trips that are forecast to use the County's transportation network in 2035. This analysis helps to establish, for each of the three alternatives, each district's proportionate share of new trips on streets that are part of the County's Capital Facilities Project (CFP) list. Understanding the proportionate share helps to determine whether there is a reasonable nexus for a particular district (under each alternative) to be responsible for all of the TIF for a project (a "district" project) or whether TIF should be shared proportionately among all districts (a "regional" project).
- **TIF Rate Analysis.** This section summarizes the potential TIF rates for the different districts under each of the three alternatives. The potential rates are compared to current rates, helping to show whether the new rates will be defensible.

A Note on Transportation Modeling

The Southwest Washington Regional Transportation Council (RTC) travel demand models for 2010 and 2035 were used for the analyses. The trip growth analysis model application compares potential boundary systems, and **only includes those projects that exist as links in the RTC model**. The RTC model is the regional model used by all Clark County jurisdictions to forecast future traffic patterns and impacts. The TIF rate analysis considers RTC model information about the new trips generated within each district (including both origins and destinations), and does not consider where these trips travel on the network.

Trip Growth Analysis

The increment of vehicle trip growth that will use future capacity-related capital projects was evaluated for each district boundary alternative. The Southwest Washington Regional Transportation Council (RTC) travel demand models for 2010 and 2035 were used to assess trip growth from various geographic areas affects based on the 2014-2033 CFP list. Vehicle trips from each of the transportation analysis zones (TAZs) in the model were assigned to the proposed district systems, and the “select link” feature from the regional travel demand model (Emme/4) was used to quantify how many of the district trips used each facility. The same analysis was applied for 2010 and for 2035. 2010 results were subtracted from 2035 results, leaving the 25-year growth increment to and from each zone for each CFP project.

County staff provided an annotated project list that specified whether each capacity-related project was to be considered Regional (costs spread among districts proportional to trip growth) or District (cost assigned to a single district). More information on how cost responsibility for each project was calculated can be found in the attachment to this memorandum.¹

Count staff assigned each District project to the TIF district where it is located under the existing boundary system. Because there are no CFP projects in the remaining fragments of the South Orchards or Evergreen districts, these assignments are equivalent to assignments under the Alternative 1 district system. The project list is shown in Table 2 with the Alternative 1 district designation where appropriate.

The project assignments under Alternative 1 also define their assignments under Alternatives 2 and 3 as follows:

- Projects assigned to **Mt. Vista** under Alternative 1 are assigned to Mt. Vista under Alternative 2 and to Urban under Alternative 3
- Projects assigned to **Hazel Dell** under Alternative 1 are assigned to Hazel Dell under Alternative 2 and to Urban under Alternative 3
- Projects assigned to **Orchards** under Alternative 1 are assigned to Orchards under Alternative 2 and to Urban under Alternative 3
- Projects assigned to **Rural 1** under Alternative 1 are assigned to Rural under Alternatives 2 and 3
- Projects assigned to **Rural 2** under Alternative 1 are assigned to Rural under Alternatives 2 and 3

¹ Clark County Traffic Impact Fee Alternatives and Draft Findings, FCS Group, March 6, 2015

² NE 47th Avenue is not part of the RTC model network, so two CFP Projects, NE 47th Avenue (NE 68th Street to NE 78th Street) and the NE 47th Avenue/NE 78th Street Intersection, are not part of the 2035 RTC model network, and was not

Table 2: CFP (2014-2033) Project Assignments

Location	From	To	Assigned to
NE 119th Street	NE 72nd Avenue	NE 87th Avenue	Regional
NE 47th Avenue/NE 78th Street	Intersection		Orchards
NE 94th Avenue	NE Padden Parkway	NE 99th Street	Orchards
Highway 99	NE 99th Street	NE 107th Street	Hazel Dell
NE 99th Street	NE 94th Avenue	NE 107th Avenue	Orchards
NE 119th Street	NE 50th Avenue	NE 72nd Avenue	Mt Vista
NE 47th Avenue	NE 68th Street	NE 78th Street	Orchards
NE 99th Street/SR 503	Intersection		Orchards
NE 10th Avenue	NE 154th Street	NE 164th Street	Mt. Vista
Padden Parkway/Andresen	Intersection		Regional
Ward Road	NE 88th Street	NE 172nd Avenue Bridge	Rural 2
Salmon Creek Avenue	WSU Entrance	NE 50th Avenue	Mt. Vista
NE 119th Street	NE 87th Avenue	NE 112th Avenue	Regional
NE 72nd Avenue	NE 122nd Street	NE 219th Street	Regional
NE 179th Street/I-5 Interchange	NE Delfel Road	NE 15th Avenue	Regional
SCIP Phase 2	NE 134th Street	I-205	Regional
NE 182nd Avenue/SR 500	Intersection		Regional
NE 15th Avenue Extension	NE 179th Street	NE 10th Avenue	Mt. Vista
NE 99th Street	NE 107th Avenue	SR 503	Orchards
NE 10th Avenue	NE 149th Street	NE 154th Street	Mt. Vista
NE 179th Street @ 29th Avenue & 50th Avenue	Intersections		Regional

Assigning “District” projects to the Alternative 1 districts where they are located allows us to group projects geographically. With five groups of projects (Mt. Vista, Hazel Dell, Orchards, Rural 2, and Regional), we were able to analyze each group and compare the share of new trips to and from each district under each alternative.

The following sections list the projects assumed for each of the five groups, and the share of trip growth to and from unincorporated Clark County areas on each group of projects under each alternative.

Project Group 1 (Mt. Vista)

Projects analyzed as part of Group 1 include:

- NE 119th Street (NE 50th Avenue to NE 72nd Avenue)
- NE 10th Avenue (NE 154th Street to 164th Street)
- Salmon Creek Avenue (WSU entrance to NE 50th Avenue)
- NE 15th Avenue Extension (NE 179th Street to NE 10th Avenue)
- NE 10th Avenue (NE 149th Street to NE 154th Street)

Table 3 shows the percentage of total trip growth that has an origin and/or destination in each district, under each alternative. Nearly two-thirds of the growth in trip ends on these facilities is to and from the Mt. Vista district under Alternatives 1 and 2. Because Hazel Dell and Orchards each account for only about 10% of the trips, it may be unreasonable to combine them into the single Urban district in Alternative 3.

Table 3. Group 1 Trip Growth Distribution

Alternative 1	% of Growth	Alternative 2	% of Growth	Alternative 3	% of Growth
Mt. Vista	64%	Mt. Vista	65%	Urban	85%
Hazel Dell	9%	Hazel Dell	8%	Rural	15%
Orchards	12%	Orchards	12%		
Rural 1	9%	Rural	15%		
Rural 2	6%				

Source: DKS Associates

Project Group 2 (Hazel Dell)

Group 2 is comprised of a single project in the Hazel Dell area:

- Highway 99 (NE 99th Street to NE 107th Street)

Table 3 shows the percentage of total trip growth that has an origin and/or destination in each district, under each alternative. Under Alternative 1, over two-thirds of the growth in traffic is attributable to Hazel Dell. Alternative 2 includes a slightly larger Mt. Vista District that encompasses some of the Highway 99 Overlay area. This alternative splits the traffic growth more evenly between Hazel Dell and Mt. Vista, weakening the rationale for making the Highway 99 project a Hazel Dell District project.

There is little basis for assigning cost responsibility to Orchards (as would occur under Alternative 3) or the rural areas, as they contribute less than 5% each to the growth in trips.

Table 4. Group 2 Trip Growth Distribution

Alternative 1	% of Growth	Alternative 2	% of Growth	Alternative 3	% of Growth
Mt. Vista	24%	Mt. Vista	32%	Urban	94%
Hazel Dell	67%	Hazel Dell	59%	Rural	6%
Orchards	3%	Orchards	3%		
Rural 1	4%	Rural	6%		
Rural 2	2%				

Source: DKS Associates

Project Group 3 (Orchards)

Projects² analyzed as part of Group 3 include:

- NE 94th Avenue (NE Padden Parkway to NE 99th Street)
- NE 99th Street (NE 94th Avenue to NE 107th Avenue)
- NE 99th Street/SR 503
- NE 99th Street (NE 107th Avenue to SR 503)

Table 3 shows the percentage of total trip growth that has an origin and/or destination in each district, under each alternative. Orchards is responsible for nearly three-quarters of the trip growth under Alternatives 1 and 2, with the other urban districts contributing under 5% each.

There may be rationale for sharing cost with Rural 1 for at least one of these projects. Under Alternative 1, about 20% of the traffic growth at NE 99th Street/SR 503 is from Rural 1.

Table 5. Group 3 Trip Growth Distribution

Alternative 1	% of Growth	Alternative 2	% of Growth	Alternative 3	% of Growth
Mt. Vista	4%	Mt. Vista	4%	Urban	81%
Hazel Dell	3%	Hazel Dell	3%	Rural	19%
Orchards	74%	Orchards	74%		
Rural 1	16%	Rural	19%		
Rural 2	3%				

Source: DKS Associates

² NE 47th Avenue is not part of the RTC model network, so two CFP Projects, NE 47th Avenue (NE 68th Street to NE 78th Street) and the NE 47th Avenue/NE 78th Street Intersection, are not part of the 2035 RTC model network, and was not analyzed.

Project Group 4 (Rural 2)

Group 4 is comprised of a single project in the Rural 2 area:

- Ward Road (NE 88th Street to NE 172nd Avenue Bridge)

Table 3 shows the percentage of total trip growth that has an origin and/or destination in each district, under each alternative. Rural 2 is responsible for over half of the trip growth, but a significant amount (about 40%) comes from Orchards as well. This analysis may not support assigning 100% of cost responsibility to the Rural or Rural 2 district.

Table 6. Group 4 Trip Growth Distribution

Alternative 1	% of Growth	Alternative 2	% of Growth	Alternative 3	% of Growth
Mt. Vista	-1%	Mt. Vista	-2%	Urban	38%
Hazel Dell	-1%	Hazel Dell	-1%	Rural	62%
Orchards	40%	Orchards	40%		
Rural 1	10%	Rural	62%		
Rural 2	52%				

Source: DKS Associates

Project Group 5 (Regional)

Projects analyzed as part of Group 5 are considered regional in nature due to facility size and dispersal of trip ends, and include:

- NE 119th Street (NE 72nd Avenue to NE 87th Avenue)
- Padden Parkway/Andresen Intersection
- NE 119th Street (NE 87th Avenue to NE 112th Avenue)
- NE 72nd Avenue (NE 122nd Street to NE 219th Street)
- NE 179th Street/I-5 Interchange
- Salmon Creek Interchange Project (SCIP) Phase 2
- NE 179th Street Intersections at NE 29th Avenue and NE 50th Avenue

Table 3 shows the percentage of total trip growth that has an origin and/or destination in each district, under each alternative. For Regional projects, the percentages of growth from each district are used to assign a proportionate share of cost responsibility to each district.

For the urban districts, under Alternatives 1 and 2, the percentage share of trip growth ranges from 14% (Hazel Dell) to 43% (Mt. Vista). This disparity in trip growth may not support combining the districts into a single Urban district under Alternative 3.

For the rural districts, there is a significant difference in trip growth between Rural 1 (13%) and Rural 2 (2%). This may not support combining the two into a single Rural district, as under Alternatives 2 and 3.

Table 7. Group 5 Trip Growth Distribution

Alternative 1	% of Growth	Alternative 2	% of Growth	Alternative 3	% of Growth
Mt. Vista	43%	Mt. Vista	43%	Urban	85%
Hazel Dell	14%	Hazel Dell	14%	Rural	15%
Orchards	28%	Orchards	28%		
Rural 1	13%	Rural	15%		
Rural 2	2%				

Source: DKS Associates

Trip Growth Analysis Summary

For this analysis, the five CFP project groups were kept constant, and new vehicle trips on these facilities were consistent among all boundary alternatives. The only differences were in how the origins and destinations of those trips were associated with districts under each alternative.

Generally, when there is a high correlation between a district's share of trip growth on a project and the district's TIF responsibility, a nexus is achieved. In analyzing trip growth in the five project groups, we found that consolidating smaller districts into larger ones often weakens this nexus. This is because consolidation often means two or more geographic areas will have the same cost responsibility for a CFP project despite contributing significantly different shares of traffic growth on the project. Table 8, below, summarizes how well each alternative fares in aligning TIF responsibility with where trip growth is occurring. As a rough approximation, an alternative fares well if it assigns "District" (Group 1-4) projects to the district where a majority of the trip growth originates. It also fares well if it does not weaken nexus by combining smaller districts that contribute little to trip growth.

Table 8: Summary: Strength of Trip Growth Correlation Between Districts and Project Groups

Project Group	Alternative 1 Six Districts	Alternative 2 Five Districts	Alternative 3 Two Districts
Group 1	+	+	-
Group 2	++	+	-
Group 3	++	++	-
Group 4	+	-	-
Group 5	++	-	-
Overall	++	+	-

Source: DKS Associates

- ++ Over 2/3 of trip growth attributable to district where project is located and combining districts does not weaken nexus
- + Over 1/2 of trip growth attributable to district where project is located and combining districts does not weaken nexus
- Combining districts weakens nexus between share of trip growth and TIF responsibility

Alternative 1 performs best across the board in maintaining nexus. Alternative 2, in combining the two Rural districts, may weaken the nexus as Rural 1 and Rural 2 contribute significantly differently to trip growth for the Group 4 and Group 5 projects. **This effect may be minor**, however: if the two districts were combined, Rural 1&2 would pay disproportionately for the Ward Road project, and Rural 2 would pay disproportionately for the Regional projects, with the result being an overall achievement of nexus. Alternative 1 also appears to perform slightly better for Group 2 due to including the Highway 99 Overlay completely within Hazel Dell.

Alternative 3 performs poorly in terms of nexus, as it does not reflect the significant differences in trip growth that are seen in Alternatives 1 and 2, particularly between the urban districts.

TIF Rate Analysis

In addition to the trip growth analysis, the potential TIF rate for the different districts under each boundary alternative was analyzed as well, and is shown in Table 9. The full documentation of this calculation is included in the Clark County Traffic Impact Fee Alternatives memorandum included in the appendix.

Table 9: TIF Rate Calculation Summary

Alternative 1	Potential TIF Rate per ADT	Alternative 2	Potential TIF Rate per ADT	Alternative 3	Potential TIF Rate per ADT	Existing	TIF Rate
Mount Vista	\$519	Mount Vista	\$499	Urban	\$330	Mount Vista	\$613
Hazel Dell	\$279	Hazel Dell	\$282			Hazel Dell	\$375
Orchards	\$301	Orchards	\$296			N. Orchards	\$553
						S. Orchards	\$389
Rural 1	\$90	Rural	\$101	Rural	\$97	Rural 1	\$315
Rural 2	\$116					Rural 2	\$52

Source: FCS Group

The TIF rate analysis shows that Alternative 2 provides the most equitable TIF rate structure, with the least spread between the highest and lowest rates and the most similarity to the rate structure as it applies currently. The rate analysis may also show support combining the Rural 1 and Rural 2 districts and/or reconsidering how the Ward Road project is allocated, as all alternatives would show a marked rate increase for outlying rural areas (Rural 2).

Summary

A summary of the boundary system evaluation is shown in Table 10, below. The following are the key findings regarding the boundary system criteria:

- All three alternatives provide boundary systems that are redrawn at the Vancouver city limits and are simpler than the existing boundary system, with fewer districts to administer, providing ease of interpretation and administration.
- Trip growth analysis shows that Alternative 1 provides the best geographic fit between trip growth and TIF responsibility. This alternative maintains five districts and is most similar to the existing district structure. Analysis showed that combining urban or rural districts weakens the nexus between trip growth and TIF responsibility, and showed that containing the Highway 99 Overlay into Hazel Dell provides a better nexus for Hazel Dell projects.
- TIF rate analysis shows that Alternative 2 provides the most equitable rate structure, with the least spread between the highest and lowest rates and closest relationship to the current rates.

Table 10: Evaluation Summary

Criteria	Alternative 1	Alternative 2	Alternative 3
Simple for developers to interpret	++	++	++
Simple for County staff to administer	++	++	++
Maintains nexus between use and funding	++	+	-
Defensible to the public	+	++	-

Source: DKS Associates

In formulating a recommended alternative, the County may wish to consider the following in order to incorporate the best aspects of Alternatives 1 and 2:

- Including all of the Highway 99 Overlay in the Hazel Dell district.
- Combining the Rural districts, understanding that overall nexus may be achieved given Rural 1's higher proportion of growth on Regional projects and Rural 2's higher proportion of growth on the Ward Road project.



Appendix

FCS Group Memorandum: Clark County Traffic Impact Fee Alternatives and Draft Findings

To: Ray Delahanty, AICP, DKS Associates

Date: March 31, 2015

From: Todd Chase and Anthony Martin, FCS GROUP

CC: Matt Hermen, Clark County

RE: Clark County Traffic Impact Fee Rate Alternatives and Draft Findings with local and regional project cost allocations

1. PURPOSE

The purpose of this memorandum is to describe the draft Clark County (County) Traffic Impact Fee (TIF) alternatives that have been developed and refined during the 2015 TIF update work now underway.

There are three alternatives for the Clark County TIF district boundaries, listed below.

- ◆ Alternative 1 (five districts): Hazel Dell, Mt. Vista, Orchards, Rural 1, and Rural 2
- ◆ Alternative 2 (four districts): Hazel Dell, Mt. Vista, Orchards, and Rural
- ◆ Alternative 3 (two districts): Urban County and Rural

Each district contains specific trip growth rates, assumptions, and project costs which will be examined below.

2. PRIVATE SHARE CALCULATIONS

In order to analyze the alternative TIF districts and related fees, the minimum private share (portion of the project attributed to growth) for each district was determined using the data from the Clark County transportation model, County staff, and DKS Associates. The private share is calculated as the change in P.M. Peak Hour Trip-Ends (PMPHTs) for each district from 2015 to 2035 over district PMPHTs in 2015.

A. GROWTH IN TRIPS AND MINIMUM PRIVATE SHARE

Exhibit 1 shows the projected growth in PMPHTs for district alternatives 1, 2, and 3. For each alternative, the amount of PMPHTs is estimated for 2010, 2015, and projected for year 2035. The growth from 2015 to 2035 serves as the denominator in the TIF calculation. The minimum private share for each district and alternative is shown in **Exhibit 1**.

Exhibit 1: Growth Assumptions

Growth in PM Peak Hour Trips						
District	2010	Proj. 2035	CAGR	Est. 2015	New PMPHTs from 2015 to 2035	Minimum Private Share
District Alternative 1						
Hazel Dell	16,244	20,831	1.00%	17,073	3,758	18%
Mt. Vista	7,956	16,371	2.93%	9,191	7,180	44%
Orchards	18,056	27,947	1.76%	19,705	8,242	29%
Rural 1	7,947	14,752	2.51%	8,993	5,759	39%
Rural 2	7,197	11,207	1.79%	7,863	3,343	30%
Total	57,400	91,107	1.87%	62,825	28,282	31%
District Alternative 2						
Hazel Dell	15,448	19,884	1.01%	16,248	3,636	18%
Mt. Vista	8,752	17,318	2.77%	10,032	7,286	42%
Orchards	18,056	27,947	1.76%	19,705	8,242	29%
Rural	15,143	25,959	2.18%	16,867	9,092	35%
Total	57,400	91,107	1.87%	62,851	28,256	31%
District Alternative 3						
Urban County	42,256	65,148	1.75%	46,078	19,070	29%
Rural	15,143	25,959	2.18%	16,867	9,092	35%
Total	57,400	91,107	1.87%	62,945	28,162	31%

Source: Clark County transportation model, analysis by DKS Associates and County staff, compiled by FCS GROUP. **Abbreviations:** CAGR - compound annual growth rate; PMPHTs - P.M. peak hour trips.

B. CAPACITY NEED FOR GROWTH AND PROJECT COSTS

County staff and DKS Associates created a project list with estimates of total project costs, County costs (after accounting for non-local funding sources), and district benefit for each project based on expected vehicle trips by district. The project list was divided into two types of projects; projects with specified locations (SL) and unspecified general improvements and programs (UGIP). SL projects have an identified location and provide benefit for TIF district(s) specified by DKS Associates. UGIP projects are programmatic and benefit multiple districts. All UGIP projects benefit urban districts (Hazel Dell, Mt. Vista, and Orchards districts).

In order to derive the capacity costs (TIF-eligible costs) for each project, project benefit was considered along with expected vehicle trips on the project by each district. The project capacity cost was calculated in one of three ways for each project:

- ◆ If a project benefitted a single district, the minimum private share for the specific district served as the capacity cost. These are identified as local projects.
- ◆ If the project benefitted multiple districts, the capacity share was calculated as the weighted average of the minimum private shares of each benefitting district. Weights were derived from the percent of expected vehicle trips on the project by each district. These are identified as regional projects.
- ◆ If a project did not have trip allocations by district, the capacity share was the weighted sum of the percent of new PMPHTs from each benefitting district by total PMPHTs of benefitting districts. These are identified as UGIP projects.

See **Appendix A** for each project's locational benefit (local, regional, or UGIP), the districts benefitted, and the weighted capacity share. Note that because each district alternative contains different minimum

private shares and trip allocations for each district, the total capacity share for each district alternative will be different.

The proposed TIF program for Clark County includes 21 projects with a specific location and 5 general improvements and programs with unspecified locations. All improvements are planned to be needed and constructed between 2015 and 2035 at a total cost of \$289.5 million. After accounting for potential non-local grants, the County anticipates that \$239.2 million in costs will need to be funded by the County (mix of TIF and other local funding sources). It is estimated that the TIF funding would be able to generate between approximately \$71 and \$81 million, depending upon the alternative chosen.

Exhibit 2 shows a summary of the total project costs and capacity costs for each district alternative. See **Appendix B** for a full list of project costs and capacity costs based on the private share assumptions.

Exhibit 2

Transportation Project Cost Summary

Project Type	2015 Total Costs	2015 County Costs	Capacity Share - SL Projects	Capacity Share - UGIP Projects	Total Capacity Share
District Alt 1	\$289,511,000	\$239,210,000	\$61,802,000	\$19,888,000	\$81,690,000
District Alt 2	\$289,511,000	\$239,210,000	\$60,694,000	\$19,533,000	\$80,227,000
District Alt 3	\$289,511,000	\$239,210,000	\$53,821,000	\$17,843,000	\$71,664,000

Source: DKS and County staff, compiled by FCS GROUP; derived from Appendix A.

Note: Costs escalated to 2015 costs using Engineering New Record, Seattle Cost Index.

Abbreviations: SL - specific location; UGIP - unspecified general improvements and programs

3. CAPACITY COSTS BY TIF DISTRICT

In order to apply capacity share project costs to specific districts, an analysis similar to calculating the capacity share was used. DKS Associates identified the scope of project benefit by providing an allocation of the projected growth in trip-ends for each project by each district, as mentioned above. Capacity costs were allocated to specific districts thusly:

- ◆ If the project was identified as local (or providing benefit primarily for one TIF district), its entire capacity share cost was attributed to one TIF district.
- ◆ If the project was identified as regional (or providing benefit to multiple TIF districts), the project capacity share was distributed to TIF districts based on trip allocations.
- ◆ If the project was classified as UGIP, the capacity share was allocated based on the weighted sum of the percent of new PMPHTs from each benefitting district by total PMPHTs of benefitting districts.

Project costs by TIF district are summarized in **Exhibit 3** and provided in detail in **Appendix C**. Note that the difference between capacity share costs in **Exhibit 2** and **Exhibit 3** is a result of rounding to the nearest \$1,000 as well as adjustment to trip allocation percentages to reflect the districts in each district alternative. See **Appendix D** for the allocation factors used in calculating TIF eligible project costs by district.

Exhibit 3: Project Capacity Share Allocation to Districts by District Alternative

Project Costs Alt 1 (Rounded to \$1,000s)						
TIF Districts						
District Alt 1	Hazel Dell	Mt. Vista	Orchards	Rural 1	Rural 2	Total
SL Projects	\$6,594,000	\$29,840,000	\$16,302,000	\$5,197,000	\$3,886,000	\$61,819,000
UGIP Projects	3,896,000	7,445,000	8,547,000	0	0	19,888,000
Total	\$10,490,000	\$37,285,000	\$24,849,000	\$5,197,000	\$3,886,000	\$81,707,000
District Alt 2	Hazel Dell	Mt. Vista	Orchards	Rural	Total	
SL Projects	\$6,472,000	\$29,026,000	\$16,037,000	\$9,175,000	\$60,710,000	
UGIP Projects	3,793,000	7,343,000	8,395,000	0	19,531,000	
Total	\$10,265,000	\$36,369,000	\$24,432,000	\$9,175,000	\$80,241,000	
Urban						
District Alt 3	County	Rural	Total			
SL Projects	\$45,047,000	\$8,836,000	\$53,883,000			
UGIP Projects	17,843,000	0	17,843,000			
Total	\$62,890,000	\$8,836,000	\$71,726,000			

Source: DKS and County staff, compiled by FCS GROUP.

Abbreviations: SL - specific location; UGIP - unspecified general improvements and programs

4. DRAFT TIF RATES BY DISTRICT ALTERNATIVE

Using the data above, a summary of the existing and potential changes in TIF rates in comparison to existing rates are provided in **Exhibit 4** for each alternative. As the current Clark County TIF is charged on an Average Daily Trip-End (ADT) basis and the analysis above is based on PMPHT, a row is provided that converts PMPHT to ADT fees. **Exhibits 4 and 5** compare potential impact fees to current impact fees.

Exhibit 4

Comparison to Existing and Potential TIF Rates per ADT				
District	Existing	Alternative 1	Alternative 2	Alternative 3
Hazel Dell	\$375	\$279	\$282	\$330
Mount Vista	\$613	\$519	\$499	
North Orchards	\$553	\$301	\$296	
South Orchards	\$389			
Rural 1	\$315	\$90	\$101	\$97
Rural 2	\$52	\$116		

Source: City staff, compiled by FCS GROUP.

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Exhibit 5: Existing and Draft Proposed TIF Rates

Existing Clark County Traffic Impact Fee per ADT

	Hazel Dell	Mount Vista	North Orchards	South Orchards	Rural 1	Rural 2
Rates	\$ 375	\$ 613	\$ 553	\$ 389	\$ 315	\$ 52

Draft District Alt 1 Traffic Impact Fee

	Hazel Dell	Mt. Vista	Orchards	Rural 1	Rural 2
Eligible SL project costs	\$ 6,594,000	\$ 29,840,000	\$ 16,302,000	\$ 5,197,000	\$ 3,886,000
Eligible UGIP project costs	3,896,000	7,445,000	8,547,000	-	-
Total project cost basis	\$ 10,490,000	\$ 37,285,000	\$ 24,849,000	\$ 5,197,000	\$ 3,886,000
New PMPHTs	3,758	7,180	8,242	5,759	3,343
Proposed SL impact fee per PMPHT	\$ 1,754	\$ 4,156	\$ 1,978	\$ 902	\$ 1,162
Proposed UGIP impact fee per PMPHT	1,037	1,037	1,037	-	-
Proposed impact fee per PMPHT	\$ 2,791	\$ 5,193	\$ 3,015	\$ 902	\$ 1,162
Proposed impact fee per ADT	279	519	301	90	116
Current impact fee per ADT	\$ 375	\$ 613	\$ 471	\$ 315	\$ 52
Proposed change	-25.6%	-15.3%	-36.0%	-71.4%	123.5%

Source: Previous tables, compiled by FCS GROUP. **Abbreviation:** ADT = average daily trip-end.

Abbreviations: SL - specific location; UGIP - unspecified general improvements and programs

Draft District Alt 2 Traffic Impact Fee

	Hazel Dell	Mt. Vista	Orchards	Rural
Eligible project costs	\$ 6,472,000	\$ 29,026,000	\$ 16,037,000	\$ 9,175,000
Eligible UGIP costs	3,793,000	7,343,000	8,395,000	-
Total project cost basis	\$ 10,265,000	\$ 36,369,000	\$ 24,432,000	\$ 9,175,000
New PMPHTs	3,636	7,286	8,242	9,092
Proposed SL impact fee per PMPHT	\$ 1,780	\$ 3,984	\$ 1,946	\$ 1,009
Proposed UGIP impact fee per PMPHT	1,043	1,008	1,019	-
Proposed impact fee per PMPHT	\$ 2,823	\$ 4,992	\$ 2,964	\$ 1,009
Proposed impact fee per ADT	282	499	296	101
Current impact fee per ADT	\$ 375	\$ 613	\$ 471	\$ 184
Proposed change	-24.7%	-18.6%	-37.1%	-45.0%

Source: Previous tables, compiled by FCS GROUP. **Abbreviation:** ADT = average daily trip-end.

Abbreviations: SL - specific location; UGIP - unspecified general improvements and programs

Draft District Alt 3 Traffic Impact Fee

	Urban County	Rural
Eligible project costs	\$ 45,047,000	\$ 8,836,000
Eligible UGIP costs	17,843,000	-
Total project cost basis	\$ 62,890,000	\$ 8,836,000
New PMPHTs	19,070	9,092
Proposed SL impact fee per PMPHT	\$ 2,362	\$ 972
Proposed UGIP impact fee per PMPHT	936	-
Proposed impact fee per PMPHT	\$ 3,298	\$ 972
Proposed impact fee per ADT	330	97
Current impact fee per ADT	\$ 483	\$ 184
Proposed change	-31.7%	-47.0%

Source: Previous tables, compiled by FCS GROUP. **Abbreviation:** ADT = average daily trip-end.

Abbreviations: SL - specific location; UGIP - unspecified general improvements and programs

APPENDIX

Appendix A – Project Capacity Share Percentages Calculated by Trip Distribution

Project Capacity Share Calculation, District Alternative 1								
			Capacity Share Weights					
Minimum Private Share by District			18%	44%	29%	39%	30%	
Project No.	Project Benefit	TIF district benefitted*	Hazel Dell	Mt. Vista	Orchards	Rural 1	Rural 2	Capacity Share Alt 1
T1	Regional		16%	22%	44%	12%	5%	32%
T2	Local	Orchards South	0%	0%	100%	0%	0%	29%
T3	Local	Orchards North	0%	0%	100%	0%	0%	29%
T5	Local	Hazel Dell	100%	0%	0%	0%	0%	18%
T6	Local	Hazel Dell	100%	0%	0%	0%	0%	18%
T7	Local	Mt. Vista	0%	100%	0%	0%	0%	44%
T8	Local	Orchards	0%	0%	100%	0%	0%	29%
T9	Local	Orchards North	0%	0%	100%	0%	0%	29%
T10	Local	Mt. Vista	0%	100%	0%	0%	0%	44%
C1	Regional		30%	9%	61%	0%	0%	27%
C2	Local	Rural 2	0%	0%	0%	0%	100%	30%
C3	Local	Mt. Vista	0%	100%	0%	0%	0%	44%
C4	Regional		16%	20%	44%	14%	6%	32%
C5	Regional		0%	34%	51%	15%	0%	36%
R1	Regional		11%	57%	6%	25%	0%	39%
R2	Regional		12%	77%	6%	5%	0%	40%
R3	Regional		5%	5%	42%	36%	12%	33%
R4	Local	Mt. Vista	0%	100%	0%	0%	0%	44%
R5	Local	Orchards North	0%	0%	100%	0%	0%	29%
R6	Local	Mt. Vista	0%	100%	0%	0%	0%	44%
R7	Regional		11%	64%	4%	10%	10%	38%
T4	UGIP	Urban area	20%	37%	43%	0%	0%	33%
C6	UGIP	urban area	20%	37%	43%	0%	0%	33%
P4	UGIP	Urban Area	20%	37%	43%	0%	0%	33%
P6	UGIP	Urban Area	20%	37%	43%	0%	0%	33%
P7	UGIP	Urban Area	20%	37%	43%	0%	0%	33%

Source: DKS and County staff, compiled by FCS GROUP.

Abbreviation:UGIP: Unspecified General Improvements and Programs

*If a project is identified as local

Project Capacity Share Calculation, District Alternative 1							
			Capacity Share Weights				
Minimum Private Share by District			18%	42%	29%	35%	
Project No.	Project Benefit	TIF district benefitted*	Hazel Dell	Mt. Vista	Orchards	Rural	Capacity Share Alt 2
T1	Regional		15%	23%	44%	17%	32%
T2	Local	Orchards South	0%	0%	100%	0%	29%
T3	Local	Orchards North	0%	0%	100%	0%	29%
T5	Local	Hazel Dell	100%	0%	0%	0%	18%
T6	Local	Hazel Dell	100%	0%	0%	0%	18%
T7	Local	Mt. Vista	0%	100%	0%	0%	42%
T8	Local	Orchards	0%	0%	100%	0%	29%
T9	Local	Orchards North	0%	0%	100%	0%	29%
T10	Local	Mt. Vista	0%	100%	0%	0%	42%
C1	Regional		30%	9%	61%	0%	27%
C2	Local	Rural 2	0%	0%	0%	100%	35%
C3	Local	Mt. Vista	0%	100%	0%	0%	42%
C4	Regional		15%	21%	44%	20%	32%
C5	Regional		0%	34%	51%	15%	35%
R1	Regional		11%	58%	7%	24%	37%
R2	Regional		14%	80%	6%	0%	38%
R3	Regional		4%	5%	42%	48%	32%
R4	Local	Mt. Vista	0%	100%	0%	0%	42%
R5	Local	Orchards North	0%	0%	100%	0%	29%
R6	Local	Mt. Vista	0%	100%	0%	0%	42%
R7	Regional		10%	66%	4%	20%	38%
T4	UGIP	Urban area	19%	38%	43%	0%	32%
C6	UGIP	urban area	19%	38%	43%	0%	32%
P4	UGIP	Urban Area	20%	37%	43%	0%	32%
P6	UGIP	Urban Area	20%	37%	43%	0%	32%
P7	UGIP	Urban Area	20%	37%	43%	0%	32%

Source: DKS and County staff, compiled by FCS GROUP.

Abbreviation:UGIP: Unspecified General Improvements and Programs

*If a project is identified as local

Project Capacity Share Calculation, District Alternative 1						
			Capacity Share Weights			
Minimum Private Share by District			29%	35%		
Project No.	Project Benefit	TIF district benefitted*	Urban County	Rural	Total	Capacity Share Alt 3
T1	Regional		83%	17%	100%	30%
T2	Local	Orchards South	100%	0%	100%	29%
T3	Local	Orchards North	100%	0%	100%	29%
T5	Local	Hazel Dell	100%	0%	100%	29%
T6	Local	Hazel Dell	100%	0%	100%	29%
T7	Local	Mt. Vista	100%	0%	100%	29%
T8	Local	Orchards	100%	0%	100%	29%
T9	Local	Orchards North	100%	0%	100%	29%
T10	Local	Mt. Vista	100%	0%	100%	29%
C1	Regional		100%	0%	100%	29%
C2	Local	Rural 2	0%	100%	100%	35%
C3	Local	Mt. Vista	100%	0%	100%	29%
C4	Regional		80%	20%	100%	30%
C5	Regional		83%	17%	100%	30%
R1	Regional		76%	24%	100%	31%
R2	Regional		100%	0%	100%	29%
R3	Regional		52%	48%	100%	32%
R4	Local	Mt. Vista	100%	0%	100%	29%
R5	Local	Orchards North	100%	0%	100%	29%
R6	Local	Mt. Vista	100%	0%	100%	29%
R7	Regional		80%	20%	100%	30%
T4	UGIP	Urban area	100%	0%	100%	29%
C6	UGIP	urban area	100%	0%	100%	29%
P4	UGIP	Urban Area	100%	0%	100%	29%
P6	UGIP	Urban Area	100%	0%	100%	29%
P7	UGIP	Urban Area	100%	0%	100%	29%

Source: DKS and County staff, compiled by FCS GROUP.

Abbreviation:UGIP: Unspecified General Improvements and Programs

*If a project is identified as local

Appendix B – Project Costs Summary by District Alternative

Transportation Project Cost Summary, District Alt 1					
Project No.	Project Road	Total Cost in 2015	County Cost in 2015	Capacity Share	Capacity Costs
Projects with an Identified Location					
T1	NE 119th St	\$ 15,367,000	\$ 9,713,000	32%	\$ 3,104,000
T2	NE 47th Ave @ NE 78th St	1,943,000	919,000	29%	271,000
T3	NE 94th Ave	7,945,000	1,520,000	29%	448,000
T5	Highway 99	9,015,000	5,595,000	18%	1,009,000
T6	NE 99th St	7,684,000	6,167,000	18%	1,113,000
T7	NE 119th St	8,441,000	7,657,000	44%	3,358,000
T8	NE 47th Ave	3,501,000	3,303,000	29%	974,000
T9	NE 99th St @ SR 503	2,325,000	1,281,000	29%	378,000
T10	NE 10th Ave	22,538,000	12,974,000	44%	5,690,000
C1	Padden Pkwy @ Andresen	15,367,000	15,367,000	27%	4,212,000
C2	Ward Road	9,937,000	9,937,000	30%	2,965,000
C3	Salmon Ck Ave	12,396,000	12,396,000	44%	5,437,000
C4	NE 119th St	26,841,000	26,841,000	32%	8,568,000
C5	NE 72nd Ave	30,734,000	30,734,000	36%	11,010,000
R1	NE 179th St/I-5 Interchange	15,367,000	15,367,000	39%	5,961,000
R2	SCIP Phase 2	17,928,000	8,196,000	40%	3,247,000
R3	NE 182nd Ave @ SR-5001	1,024,000	1,024,000	33%	340,000
R4	NE 15th Ave Extension2	7,171,000	1,537,000	44%	674,000
R5	NE 99th St	1,024,000	452,000	29%	133,000
R6	NE 10th Ave	2,151,000	2,151,000	44%	943,000
R7	NE 179th St@29th Ave & @50th Ave	5,122,000	5,122,000	38%	1,967,000
	Subtotal	223,821,000	178,253,000		61,802,000
Unspecified General Improvements and Programs					
T4	TSO Projects (5)	6,270,000	1,537,000	33%	501,000
C6	Urban Arterial Intersections	15,367,000	15,367,000	33%	5,014,000
P4	Sidewalks and ADA	12,294,000	12,294,000	33%	4,011,000
P6	Urban Development Road Prgm	25,612,000	25,612,000	33%	8,356,000
P7	Traffic Signal Optimization	6,147,000	6,147,000	33%	2,006,000
	Subtotal	65,690,000	60,957,000		19,888,000
	Total	\$ 289,511,000	\$ 239,210,000		\$ 81,690,000

Source: DKS and County staff, compiled by FCS GROUP.

Note: Costs escalated to 2015 costs using Engineering New Record, Seattle Cost Index.

January 2014	January 2015
10,140	10,388

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Transportation Project Cost Summary, District Alt 2					
Project No.	Project Road	Total Cost in 2015	County Cost in 2015	Capacity Share	Capacity Costs
Projects with an Identified Location					
T1	NE 119th St	\$ 15,367,000	\$ 9,713,000	32%	\$ 3,069,000
T2	NE 47th Ave @ NE 78th St	1,943,000	919,000	29%	271,000
T3	NE 94th Ave	7,945,000	1,520,000	29%	448,000
T5	Highway 99	9,015,000	5,595,000	18%	1,023,000
T6	NE 99th St	7,684,000	6,167,000	18%	1,128,000
T7	NE 119th St	8,441,000	7,657,000	42%	3,221,000
T8	NE 47th Ave	3,501,000	3,303,000	29%	974,000
T9	NE 99th St @ SR 503	2,325,000	1,281,000	29%	378,000
T10	NE 10th Ave	22,538,000	12,974,000	42%	5,458,000
C1	Padden Pkwy @ Andresen	15,367,000	15,367,000	27%	4,188,000
C2	Ward Road	9,937,000	9,937,000	35%	3,480,000
C3	Salmon Ck Ave	12,396,000	12,396,000	42%	5,215,000
C4	NE 119th St	26,841,000	26,841,000	32%	8,472,000
C5	NE 72nd Ave	30,734,000	30,734,000	35%	10,639,000
R1	NE 179th St/I-5 Interchange	15,367,000	15,367,000	37%	5,667,000
R2	SCIP Phase 2	17,928,000	8,196,000	38%	3,113,000
R3	NE 182nd Ave @ SR-5001	1,024,000	1,024,000	32%	331,000
R4	NE 15th Ave Extension2	7,171,000	1,537,000	42%	647,000
R5	NE 99th St	1,024,000	452,000	29%	133,000
R6	NE 10th Ave	2,151,000	2,151,000	42%	905,000
R7	NE 179th St@29th Ave & @50th Ave	5,122,000	5,122,000	38%	1,934,000
	Subtotal	223,821,000	178,253,000		60,694,000
Unspecified General Improvements and Programs					
T4	TSO Projects (5)	6,270,000	1,537,000	32%	494,000
C6	Urban Arterial Intersections	15,367,000	15,367,000	32%	4,940,000
P4	Sidewalks and ADA	12,294,000	12,294,000	32%	3,935,000
P6	Urban Development Road Prgm	25,612,000	25,612,000	32%	8,197,000
P7	Traffic Signal Optimization	6,147,000	6,147,000	32%	1,967,000
	Subtotal	65,690,000	60,957,000		19,533,000
	Total	\$ 289,511,000	\$ 239,210,000		\$ 80,227,000

Source: DKS and County staff, compiled by FCS GROUP.

Note: Costs escalated to 2015 costs using Engineering New Record, Seattle Cost Index.

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Transportation Project Cost Summary, District Alt 3					
Project No.	Project Road	Total Cost in 2015	County Cost in 2015	Capacity Share	Capacity Costs
Projects with an Identified Location					
T1	NE 119th St	\$ 15,367,000	\$ 9,713,000	30%	\$ 2,924,000
T2	NE 47th Ave @ NE 78th St	1,943,000	919,000	29%	269,000
T3	NE 94th Ave	7,945,000	1,520,000	29%	445,000
T5	Highway 99	9,015,000	5,595,000	29%	1,638,000
T6	NE 99th St	7,684,000	6,167,000	29%	1,805,000
T7	NE 119th St	8,441,000	7,657,000	29%	2,241,000
T8	NE 47th Ave	3,501,000	3,303,000	29%	967,000
T9	NE 99th St @ SR 503	2,325,000	1,281,000	29%	375,000
T10	NE 10th Ave	22,538,000	12,974,000	29%	3,798,000
C1	Padden Pkwy @ Andresen	15,367,000	15,367,000	29%	4,514,000
C2	Ward Road	9,937,000	9,937,000	35%	3,480,000
C3	Salmon Ck Ave	12,396,000	12,396,000	29%	3,629,000
C4	NE 119th St	26,841,000	26,841,000	30%	8,170,000
C5	NE 72nd Ave	30,734,000	30,734,000	30%	9,345,000
R1	NE 179th St/I-5 Interchange	15,367,000	15,367,000	31%	4,724,000
R2	SCIP Phase 2	17,928,000	8,196,000	29%	2,399,000
R3	NE 182nd Ave @ SR-5001	1,024,000	1,024,000	32%	328,000
R4	NE 15th Ave Extension2	7,171,000	1,537,000	29%	450,000
R5	NE 99th St	1,024,000	452,000	29%	132,000
R6	NE 10th Ave	2,151,000	2,151,000	29%	630,000
R7	NE 179th St@29th Ave & @50th Ave	5,122,000	5,122,000	30%	1,558,000
	Subtotal	223,821,000	178,253,000		53,821,000
Unspecified General Improvements and Programs					
T4	TSO Projects (5)	6,270,000	1,537,000	29%	450,000
C6	Urban Arterial Intersections	15,367,000	15,367,000	29%	4,498,000
P4	Sidewalks and ADA	12,294,000	12,294,000	29%	3,599,000
P6	Urban Development Road Prgm	25,612,000	25,612,000	29%	7,497,000
P7	Traffic Signal Optimization	6,147,000	6,147,000	29%	1,799,000
	Subtotal	65,690,000	60,957,000		17,843,000
	Total	\$ 289,511,000	\$ 239,210,000		\$ 71,664,000

Source: DKS and County staff, compiled by FCS GROUP.

Note: Costs escalated to 2015 costs using Engineering New Record, Seattle Cost Index.

Appendix C – TIF-Eligible Costs by District

Project Costs Alt 1 (Rounded to \$1,000s)							
Project							
No.	Project Road	Hazel Dell	Mt. Vista	Orchards	Rural 1	Rural 2	Total
T1	NE 119th St	\$ 506,000	\$ 679,000	\$ 1,376,000	\$ 381,000	\$ 162,000	\$ 3,104,000
T2	NE 47th Ave @ NE 78th St	-	-	271,000	-	-	271,000
T3	NE 94th Ave	-	-	448,000	-	-	448,000
T5	Highway 99	1,009,000	-	-	-	-	1,009,000
T6	NE 99th St	1,113,000	-	-	-	-	1,113,000
T7	NE 119th St	-	3,358,000	-	-	-	3,358,000
T8	NE 47th Ave	-	-	974,000	-	-	974,000
T9	NE 99th St @ SR 503	-	-	378,000	-	-	378,000
T10	NE 10th Ave	-	5,690,000	-	-	-	5,690,000
C1	Padden Pkwy @ Andresen	1,261,000	383,000	2,573,000	-	-	4,217,000
C2	Ward Road	-	-	-	-	2,965,000	2,965,000
C3	Salmon Ck Ave	-	5,437,000	-	-	-	5,437,000
C4	NE 119th St	1,382,000	1,745,000	3,732,000	1,196,000	513,000	8,568,000
C5	NE 72nd Ave	-	3,737,000	5,623,000	1,658,000	-	11,018,000
R1	NE 179th St/I-5 Interchange	682,000	3,405,000	382,000	1,494,000	-	5,963,000
R2	SCIP Phase 2	402,000	2,505,000	186,000	155,000	-	3,248,000
R3	NE 182nd Ave @ SR-5001	16,000	18,000	144,000	123,000	40,000	341,000
R4	NE 15th Ave Extension2	-	674,000	-	-	-	674,000
R5	NE 99th St	-	-	133,000	-	-	133,000
R6	NE 10th Ave	-	943,000	-	-	-	943,000
R7	NE 179th St@29th Ave & @50th Ave	223,000	1,266,000	82,000	190,000	206,000	1,967,000
	Subtotal	6,594,000	29,840,000	16,302,000	5,197,000	3,886,000	61,819,000
T4	TSO Projects (5)	98,000	188,000	215,000	-	-	501,000
C6	Urban Arterial Intersections	982,000	1,877,000	2,155,000	-	-	5,014,000
P4	Sidewalks and ADA	786,000	1,501,000	1,724,000	-	-	4,011,000
P6	Urban Development Road Prgm	1,637,000	3,128,000	3,591,000	-	-	8,356,000
P7	Traffic Signal Optimization	393,000	751,000	862,000	-	-	2,006,000
	Subtotal	3,896,000	7,445,000	8,547,000	-	-	19,888,000
	Total	\$ 10,490,000	\$ 37,285,000	\$ 24,849,000	\$ 5,197,000	\$ 3,886,000	\$ 81,707,000

Source: DKS and County staff, compiled by FCS GROUP.

March 31, 2015
Clark County
Traffic Impact Fee Alternatives

Project Costs Alt 2 (Rounded to \$1,000s)						
Project No.	Project Road	Hazel Dell	Mt. Vista	Orchards	Rural	Total
T1	NE 119th St	\$ 473,000	\$ 699,000	\$ 1,361,000	\$ 537,000	\$ 3,070,000
T2	NE 47th Ave @ NE 78th St	-	-	271,000	-	271,000
T3	NE 94th Ave	-	-	448,000	-	448,000
T5	Highway 99	1,023,000	-	-	-	1,023,000
T6	NE 99th St	1,128,000	-	-	-	1,128,000
T7	NE 119th St	-	3,221,000	-	-	3,221,000
T8	NE 47th Ave	-	-	974,000	-	974,000
T9	NE 99th St @ SR 503	-	-	378,000	-	378,000
T10	NE 10th Ave	-	5,458,000	-	-	5,458,000
C1	Padden Pkwy @ Andresen	1,266,000	370,000	2,558,000	-	4,194,000
C2	Ward Road	-	-	-	3,480,000	3,480,000
C3	Salmon Ck Ave	-	5,215,000	-	-	5,215,000
C4	NE 119th St	1,291,000	1,801,000	3,690,000	1,690,000	8,472,000
C5	NE 72nd Ave	-	3,624,000	5,446,000	1,576,000	10,646,000
R1	NE 179th St/I-5 Interchange	647,000	3,307,000	370,000	1,345,000	5,669,000
R2	SCIP Phase 2	436,000	2,490,000	187,000	-	3,113,000
R3	NE 182nd Ave @ SR-5001	15,000	18,000	140,000	158,000	331,000
R4	NE 15th Ave Extension2	-	647,000	-	-	647,000
R5	NE 99th St	-	-	133,000	-	133,000
R6	NE 10th Ave	-	905,000	-	-	905,000
R7	NE 179th St@29th Ave & @50th Ave	193,000	1,271,000	81,000	389,000	1,934,000
	Subtotal	6,472,000	29,026,000	16,037,000	9,175,000	60,710,000
T4	TSO Projects (5)	94,000	188,000	212,000	-	494,000
C6	Urban Arterial Intersections	937,000	1,878,000	2,125,000	-	4,940,000
P4	Sidewalks and ADA	771,000	1,473,000	1,691,000	-	3,935,000
P6	Urban Development Road Prgm	1,606,000	3,068,000	3,522,000	-	8,196,000
P7	Traffic Signal Optimization	385,000	736,000	845,000	-	1,966,000
	Subtotal	3,793,000	7,343,000	8,395,000	-	19,531,000
	Total	\$ 10,265,000	\$ 36,369,000	\$ 24,432,000	\$ 9,175,000	\$ 80,241,000

Source: DKS and County staff, compiled by FCS GROUP.

March 31, 2015
Clark County
Traffic Impact Fee Alternatives

Project Costs Alt 3 (Rounded to \$1,000s)				
Project No.	Project Road	Urban County	Rural	Total
T1	NE 119th St	\$ 2,412,000	\$ 497,000	\$ 2,909,000
T2	NE 47th Ave @ NE 78th St	269,000	-	269,000
T3	NE 94th Ave	445,000	-	445,000
T5	Highway 99	1,638,000	-	1,638,000
T6	NE 99th St	1,805,000	-	1,805,000
T7	NE 119th St	2,241,000	-	2,241,000
T8	NE 47th Ave	967,000	-	967,000
T9	NE 99th St @ SR 503	375,000	-	375,000
T10	NE 10th Ave	3,798,000	-	3,798,000
C1	Padden Pkwy @ Andresen	4,530,000	-	4,530,000
C2	Ward Road	-	3,480,000	3,480,000
C3	Salmon Ck Ave	3,629,000	-	3,629,000
C4	NE 119th St	6,540,000	1,634,000	8,174,000
C5	NE 72nd Ave	7,768,000	1,621,000	9,389,000
R1	NE 179th St/I-5 Interchange	3,604,000	1,134,000	4,738,000
R2	SCIP Phase 2	2,399,000	-	2,399,000
R3	NE 182nd Ave @ SR-5001	171,000	157,000	328,000
R4	NE 15th Ave Extension2	450,000	-	450,000
R5	NE 99th St	132,000	-	132,000
R6	NE 10th Ave	630,000	-	630,000
R7	NE 179th St@29th Ave & @50th Ave	1,244,000	313,000	1,557,000
	Subtotal	45,047,000	8,836,000	53,883,000
T4	TSO Projects (5)	450,000	-	450,000
C6	Urban Arterial Intersections	4,498,000	-	4,498,000
P4	Sidewalks and ADA	3,599,000	-	3,599,000
P6	Urban Development Road Prgm	7,497,000	-	7,497,000
P7	Traffic Signal Optimization	1,799,000	-	1,799,000
	Subtotal	17,843,000	-	17,843,000
	Total	\$ 62,890,000	\$ 8,836,000	\$ 71,726,000

Source: DKS and County staff, compiled by FCS GROUP.

Appendix D – Trip Percentages Used to Calculate TIF District Share

Transportation Project Cost Summary												
		Percent of Project to Overlay Alt 1					Percent of Project to Overlay Alt 2				Percent of Project to Overlay Alt 3	
Project No.	Project Road	Hazel Dell	Mt. Vista	Orchards	Rural 1	Rural 2	Hazel Dell	Mt. Vista	Orchards	Rural	Urban County	Rural
T1	NE 119th St	16%	22%	44%	12%	5%	15%	23%	44%	17%	83%	17%
T2	NE 47th Ave @ NE 78th St	0%	0%	100%	0%	0%	0%	0%	100%	0%	100%	0%
T3	NE 94th Ave	0%	0%	100%	0%	0%	0%	0%	100%	0%	100%	0%
T4	TSO Projects (5)	20%	37%	43%	0%	0%	19%	38%	43%	0%	100%	0%
T5	Highway 99	100%	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%
T6	NE 99th St	100%	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%
T7	NE 119th St	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%
T8	NE 47th Ave	0%	0%	100%	0%	0%	0%	0%	100%	0%	100%	0%
T9	NE 99th St @ SR 503	0%	0%	100%	0%	0%	0%	0%	100%	0%	100%	0%
T10	NE 10th Ave	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%
C1	Padden Pkwy @ Andresen	30%	9%	61%	0%	0%	30%	9%	61%	0%	100%	0%
C2	Ward Road	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%	100%
C3	Salmon Ck Ave	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%
C4	NE 119th St	16%	20%	44%	14%	6%	15%	21%	44%	20%	80%	20%
C5	NE 72nd Ave	0%	34%	51%	15%	0%	0%	34%	51%	15%	83%	17%
C6	Urban Arterial Intersections	20%	37%	43%	0%	0%	19%	38%	43%	0%	100%	0%
R1	NE 179th St/I-5 Interchange	11%	57%	6%	25%	0%	11%	58%	7%	24%	76%	24%
R2	SCIP Phase 2	12%	77%	6%	5%	0%	14%	80%	6%	0%	100%	0%
R3	NE 182nd Ave @ SR-5001	5%	5%	42%	36%	12%	4%	5%	42%	48%	52%	48%
R4	NE 15th Ave Extension2	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%
R5	NE 99th St	0%	0%	100%	0%	0%	0%	0%	100%	0%	100%	0%
R6	NE 10th Ave	0%	100%	0%	0%	0%	0%	100%	0%	0%	100%	0%
R7	NE 179th St@29th Ave & @50th Ave	11%	64%	4%	10%	10%	10%	66%	4%	20%	80%	20%
P4	Sidewalks and ADA	20%	37%	43%	0%	0%	20%	37%	43%	0%	100%	0%
P6	Urban Development Road Prgm	20%	37%	43%	0%	0%	20%	37%	43%	0%	100%	0%
P7	Traffic Signal Optimization	20%	37%	43%	0%	0%	20%	37%	43%	0%	100%	0%

Source: DKS and County staff, compiled by FCS GROUP.